Order No.: DD+DIS154.01E

1 Piece UOP8A MA1

F7.5155.9006.0
(only for production purposes)

ADC Solo
Type 5155/100

Path Speed CR SP1001
Type 5155/200

Installation Instructions for Software
SOL_1302

Please file this document in section 10
of the Technical Documentation ADC Solo

List of Contents

1   General

⚠	The Upgrade to SOL_1302 is a must Modification!

1.1   Prerequisites

As of Software version SOL_1213 more sensors are checked, error messages may occur, if the mechanics are not adjusted properly.

Possible Problems after installing the Software

No bugs of the software, but tolerances of the hardware.

Error	Reason	Cure
24733	Communication problem IOBUS	Replace Power Integration board
"078F" checksum error	Read error of the floppy disk	Check floppy with "scandisk" or a similar tool Check the disk drive A:\ via user interface. Replace BER board

1.2   Hardware Requirements

VME – Rack

- 33 MHz Gemini Board
- EEPROM Mon 4.26
- 32 MB MEMORY Board
- BER-Board with Ethernet
- VSCB, VERA Scan-Ctrl-Board, Revision 0 or higher with Serial PROM Version SCBV3026 or higher
- SAB, Scan-Acquisition-Board, Revision 1 or higher
- VERA VME-Adapter Board, Revision 1 or higher
- Floppy (no SCSI)
- 1.2 GB SCSI Hard-Disk
- Stepper Motor Boards GS-IOB-SIN-STEP for download (no EPROM)

1.3   Software Requirements

Recommended software configuration:

Either:

Configuration	Preview and ID-Station	Processing-Device	Medical-Gateway (HC)
One ADC-Solo Connected to **VIPS** Connected to **Preview & ID-Stations** Connected to **MG/LR3300**	PRID1.1.05	VIPS1.0.05	**MEGA3.32** OEM35xxx Mon 4.03 DCM2.3.3 LTP01804

Or:

Configuration	Preview and ID-Station	Processing-Device	Medical-Gateway (HC)
One ADC-Solo Connected to **VIPS** Connected to **Preview & ID-Stations**	PRID1.1.07	VIPS1.0.09	**MEGA3.32** OEM35xxx Mon 4.03 DCM2.3.3 LTP01804

For Direct ID / Fast Preview and/or Mammo Cassettes this combination is required:

Configuration	Preview and ID-Station	Processing-Device	Medical-Gateway (HC)
One ADC-Solo Connected to **VIPS** Connected to **Preview & ID-Stations**	$>$ PRID1.2.09	$\geq$ VIPS1.1.11	**MEGA3.32** OEM35xxx Mon 4.03 DCM2.3.3 LTP01804

> For the option Fast Preview CCM tool version 1.1.06 is needed.

1.4   Order Number:

CM+9.5155.1050.6

1.5   Scope of Delivery

- SOL_1302
  4 floppy disks (1 x "HD formatter" floppy (boot floppy) , 3 x application program floppies)
- 1 floppy Language files LNG 1.005 for PRID $\geq$ 1.1.05
- 1 empty floppy disk
- 1 upgrade instruction (DD+DIS154.01E)

> Due to wrong usage, from now on the boot floppy is named "HD formatter floppy".

2   Installation of Software (Normal Upgrade-Procedure)

Upgrade to SOL_1302

> Do not use the HD formatter (boot floppy)!

- Make a new backup of the machine specific data
- Select

```
<Service Menu>
            <Install from floppy>
                              <Software>
```

- Follow the online instructions.

3   Configuration of Direct ID / Fast Preview (Options)

For the configuration of the options Direct ID and Fast Preview see DD+DIS081.01E, which is part of this upgrade kit.

4   Restore of the Complete System (After a Hard Disk Replacement)

The restore procedure is part of the Service Documentation DD+DIS231.98E (Section 6.5)

> Do not forget to restore the test images from CDROM CM+9.5145.1055.0. after the restore procedure.

5   Downgrade Procedure SOL_1302> SOLG1108

⚠️ **If an Erasure-Ctrl-board labeled with F8.5145.6420.X is installed, you must not execute the downgrade procedure.**

☞ The only reason to downgrade is you cannot pass the hardware requirements. It is not recommended to downgrade from higher software versions to lower ones. You might run into problems if you do not follow the procedure. Even if everything works fine, you will lose valuable infocounter information or get nonsense entries in the infocounter file.

Prerequisites:

- Backup floppy with machine specific data
- Service - PC
- Interface cable (RS232) Digitizer => Service PC

Downgrade Procedure

- Install the software SOLG1108:

    `<INSTALL from floppy>`
                        `<Software>`
- After installation cancel the upcoming message "`To initialize the new software a reset is necessary`".
- Change the attribute of the file ICN.DAT from read only to write access r – x > r – w – x
  `adcs_D:\> chmod + write ICN.DAT`.
- Delete the files ICN.DAT and ICN_1001.DAT:
  `adcs_D:\> del *.DAT`
- Immediately restore the SOL_11xx backup floppy:

    `<INSTALL from floppy – >`
                        `<Machine specific data>`
- Activate the reset-switch on ADC-Solo's VME-Rack immediately after restoring the backup.
- End of downgrade procedure

Possible Problems after Downgrading

Error: The machine does not start-up anymore. The display just shows a blinking cursor.

Reason: If the machine accidentally tried to update the infocounters (touch the file ICN_1001.DAT), a new file has been created. This file format is not readable by the older software and therefore the system crashes.

Cure: Delete the file ICN_1001.DAT again and reset the machine immediately.

If this procedure does not work at all, the only solution is to start with the HD Formatter (boot) floppy and load the software. Nevertheless, do not forget to re-install the machine specific data and the CPF-file.

Activate the CPF with `Configure – Change local network ID`

6   What is New in SOL_1302

6.1   Technical Specifications

- Longer light barrier flags for the scan rolls lift drive are supported. This flag improves the clamping of the image plate.
- Rescue cycles are performed in case of former errors 247A7 and 247AA.
- Former error code 247A6 is replaced by 247AB and 247AC to show more details.
- Debouncing of the vacuum sensor is improved.
- Alignment of 8'' x 10'' cassettes is improved.
- Direct Identification is fully supported.
- Fast Preview is fully supported.
- Scan size 21 cm x 43 cm (asymmetric) is supported.
- Mammo Cassettes are fully supported.
- In Full Leg/Full Spine mode, the scan area has been improved.
  It is, however, not possible to work in Full Leg/Full Spine mode together with Direct Identification.
- I/V-converter signal is now adjusted periodically and tested during start-up.
- During sweep, calibration an additional error might appear due to extended tests during this calibration. This might lead to the new error code 20C76.
- ADC Solo is able to handle hard disks $>$ 2 GB.
- New acceleration curve for slow scan drive. This modification has an impact on the throughput.
- Full support for Erasure Control Board F8.5155.6410.1, F8.5155.6410.3, F8.5155.6410.4.
- Correct Size Matching Factor in HT-Formula.
- MT-safe and corrected version of stepper driver and UPI-layer.
- Optimized stepper motor currents.
- The vacuum system tests are now tolerant against the latency of the sensors.

6.2   User Interface

- Name of the Service Report File has changed from d:/SOL_<fn_nr>.rpt to d:/<fn_nr>rpt.rpt in order to have a unique name for it even after having compressed it for download through the HTML interface.

6.3   Additional Service Functionalities

- The total amount of cycles is stored now in a list with one entry per month. This list is open-ended.

7   Known Bugs in SOL_1302

- It is possible that the message "<workstation> not ready" appears more frequently due to network timeouts. In such a case, a retransmission is initiated automatically. There is no need to reset the digitizer. Even the message on the screen does not need to be confirmed explicitly. This came along with the introduction of a new network driver that offers a considerable higher throughput in an ordinary networking environment.

- Direct ID and "Image queue full"
  If the digitizer is set to offline mode in the key operator menu and the direct identification mode is selected, the system hangs after all image buffers (10) are full.

- In heavily loaded networking environments or due to performance restrictions of the Preview/ID-Station, it is possible that the message "<workstation> not ready" appears more frequently, if both, fast preview and direct identification are enabled. This will initiate a retransmission of the image to the workstation, but there is no need for any user intervention whatsoever.

- Image loss when power-off immediately (within a few seconds) after the scan.

- Cassette not marked "erased" when power-off at a certain position during return of IP into the cassette.

8   Important Remarks

To avoid any formatting, the ‚format' program is delivered no more. 'format' would cause a complete loss of the test images.